

providing means for scrolling the window; and

displaying in the window a first portion of the document; and

receiving a scroll initiate event, and

causing the first portion of the document being marked in a memory storage as processed information and the rest of the document being marked as not processed information; and

scrolling the window to display a second portion of the document; and

causing visual clues, not obstructing the view of not processed information, to be displayed in the window to visually distinguish processed and not processed information displayed in the window, said visual clues directing user's attention to not processed information displayed in the window; and

disabling the directing visual clues after a first predetermined amount of time.

28. The method of claim 27,

wherein causing the first portion of the document being marked in a memory storage as processed information and the rest of the document being marked as not processed information being performed only if the first portion of the document is displayed in the window for more than a second predetermined amount of time.

29. The method of claim 27,

wherein providing the directing visual clues is accomplished via displaying processed information and not processed information as visually different, which is accomplished by changing visual attributes of foreground and background of processed information, visual attributes of foreground and background of not processed information, or visual attributes of foreground and background of both processed and not processed information; said visual attributes are selected from the group consisting of at least: color, intensity, texture, contrast, brightness, orientation, gloss, line width, line pattern, line density, line fuzziness, blinking, movement, gradient, shadow, lighting, depth, image vagueness, font type, font size, font style, font format, size of visual components, after scrolling display time delay, as well as combinations and dynamic transformations of the above attributes.

30. The method of claim 27,

wherein providing the directing visual clues is accomplished via visual de-emphasis of processed information, said de-emphasis accomplished through changing visual attributes of the visual image displaying processed information to make said visual image less salient.

31. The method of claim 27,

wherein providing the directing visual clues is accomplished via displaying either processed information or not processed information in the window after scrolling to the second portion of the document after a third predetermined amount of time.

32. The method of claim 27,

wherein providing the directing visual clues is accomplished via visual emphasis of not processed information, such as changing visual attributes of the foreground and the background of visual image displaying not processed information to make said visual image more salient.

33. The method of claim 32,

wherein providing the directing visual clues is accomplished via visual emphasis of a part of not processed information, said part located near area, on which a user is likely to focus his or her attention immediately after scrolling.

34. The method of claim 27,

wherein providing the directing visual clues is accomplished via temporarily displaying a border separating area or areas of a window displaying processed information and area or areas of the said window displaying not processed information.

35. The method of claim 27,

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wherein providing the directing visual clues is accomplished via displaying an object or objects on the margin or margins of a window in the proximity of the area where not processed information is located in the said window after scrolling.

36. The method of claim 35,

wherein orientation or shape of the marginal object or objects indicate the direction in which not processed information is located in the window relative to the marginal object or objects.

37. The method of claim 27,

wherein disabling the directing visual clues is performed so that said visual clues are being disabled gradually.

38. The method of claim 27,

wherein directing visual clues are enabled only when the second portion is the last portion of the document.

39. The method of claim 27,

wherein means are provided for defining an effective area as a rectangle within the window area; and

wherein only the portion of the document displayed in the effective area is marked as processed information and the rest of the document as not processed information.

40. The method of claim 39 further comprising the steps of

allowing a user to carry out small increment scrolling by using an input device that a user can use while controlling the screen pointer; and

allowing a user to dynamically define the effective area by moving screen pointer so that the Y screen coordinate of screen pointer is equal to the Y screen coordinate of the bottom of the effective area in the case of small increment downwards scrolling and/or the Y screen coordinate of screen pointer is equal the Y

screen coordinate of the top of the effective area in the case of small increment upwards scrolling.

41. The method of claim 39, further comprising the steps of:

- providing a screen control or controls emerging in a window after small increment scrolling for a fourth predetermined amount of time; and
- allowing a user to define the effective area by dragging the emerging screen control or screen controls.

42. The method of claim 27,

wherein means are provided for a user to set one or more settings selected from a group consisting of at least: the first predetermined amount of time, the second predetermined amount of time, the direction of scrolling, types of directing visual clues and their behaviors, parameters of the effective area, whether controls and methods for defining effective area are enabled or disabled, correspondence between parameters of scrolling and types of the directing visual clues, whether the directing visual clues are enabled or disabled.

43. A method of claim 27, further comprising the steps of:

- providing means for resizing the window; and
- displaying a third portion of the document in the window after resizing, said third portion possibly overlapping with the first portion; and
- causing visual clues, not obstructing the view of not processed information, to be displayed in the window displaying the third portion of the document, to visually distinguish processed and not processed information displayed in the window, said visual clues directing user's attention to not processed displayed information in the window; and
- disabling the directing visual clues after a third predetermined amount of time.

44. An apparatus comprising a memory storage and a display device, further comprising:

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a window for displaying a document, said window displaying a first portion of the document; and

means for scrolling the window; and

means for receiving scroll initiate events, and

marking means for causing the first portion of the document being marked in the memory storage as processed information and the rest of the document as not processed information; and

means for causing a second portion of the document to be displayed in the window after scrolling; and

means for causing visual clues, not obstructing the view of not processed information, to be displayed in the window displaying the second portion of the document, to visually distinguish processed and not processed information displayed in the window, said visual clues directing user's attention to not processed information displayed in the window; and

means for disabling the directing visual clues after a first predetermined amount of time.

45. The apparatus of claim 44, further comprising:

means for causing the first portion of the document being marked in a memory storage as processed information and the rest of the document being marked as not processed information only if the first portion of the document is displayed in the window for more than a second predetermined amount of time.

46. The apparatus of claim 44, further comprising:

means for detecting the scrolling increment; and

means for detecting the direction of scrolling; and

means for detecting the input device or devices used for scrolling; and

means for detecting the type of scroll initiate event; and

means for selecting the directing visual clues depending on one or more parameters selected from the group consisting of at least: scrolling increment, scrolling direction, location of processed information in a window after scrolling, input device used for scrolling, and type of scroll initiate event.